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ABSTRACT

This paper presents a discussion of several factors which influence evaluation utilization. Its purpose is to propose to Alkin's utilization framework the addition of one factor: multiplexity of data gathering methods. Two distinct discussions comprise this paper. First, supportive arguments for the assumption that this factor substantially contributes to utilization are presented. Then, to provide preliminary evidence of the factor's legitimacy, an exploratory study of four highly-utilized educational program evaluations is described. County Public Schools (Florida) sponsored the four programs: (1) the Summer Inservice Institutes; (2) the Chapter 1 Reading Microcomputer Component; (3) the Elementary Academic Gifted Program; and (4) the Laboratory for Individual Foundation Teaching. Preliminary research supports the soundness of the additional factor and also indicates revision and/or thinking of two framework categories: evaluation factors and human factors. In addition to timeliness and substance, Alkin's framework contains other factors which survey respondents in this study considered as major influences in their evaluation utilization. The results indicate that a variety of data gathering methods not only affects uniquely the use of evaluation information, but also contributes to related utilization factors, such as evaluator's willingness to involve users, evaluator's rapport with users, evaluator's credibility, user's commitment to use, substance of evaluation information, and evaluation reporting. (Author/PN)

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Fostering Utilization Through Multiple Data Gathering Methods

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Abstract

This paper presents a discussion of several factors which influence evaluation utilization. Its purpose is to propose to Alkin's utilization framework the addition of one factor: multiplexity of data gathering methods. Toward this end, two distinct discussions comprise the paper. First, supportive arguments for the assumption that this factor substantially contributes to utilization are presented. Then, to provide preliminary evidence of the factor's legitimacy, an exploratory study of four highly-utilized educational program evaluations is described.

Introduction

To borrow a phrase from the incomparable Casey Stengel, the study of evaluation utilization has "...come along slow, but fast." Casey's remark referred, of course, to baseball's Miracle Mets whose usual plodding seasons in the cellar turned around suddenly in the summer of 1969. While our subject pales beside the "old professor's" in terms of drama and excitement, his message can be appropriately applied to the past decade's research into and discussion of evaluation utilization.

Who first spotted the unused evaluation reports in social service, education, and government agency basements, or who first lamented their idleness is unknown. In the past ten years, however, dozens of articles have been written, papers presented, and studies conducted to discover and discuss factors which influence utilization. Most recently, the Center for the Study of Evaluation at UCLA has developed a tri-category analytic framework with the purpose of providing a formal structure for understanding and conducting research on utilization (Alkin, 1984). Within three general categories (context factors, human factors and evaluation factors) multiple descriptors comprise the framework which is based on a review and analysis of the utilization literature, several case studies and the contributors' experiences in conducting evaluations. Because it is intended to guide practitioners', theoreticians' and researchers' efforts in subsequent years and has been distributed for that purpose, the framework, shown in figure 1, should be as inclusive as possible.

Insert Figure 1 About Here

The purpose of this paper is to propose the addition of one factor to the framework: multiplexity (variety) of data gathering methods. Toward this end, two distinct discussions comprise the paper. First, supportive arguments for the assumption that this factor substantially contributes to utilization are presented and relevant literature is cited. Then, to provide preliminary evidence of the factor's legitimacy, an exploratory study of four highly-utilized educational program evaluations is described.

Before beginning a discussion of the declared topic, some prefatory remarks are necessary to familiarize readers with our experiences and positions (i.e., biases) regarding the study of utilization. As internal evaluators in a large school district, we know first-hand the truth of Alkin's, Daillak's and White's (1979: 233) statement, "...the degree of utilization of the evaluation apparently is not determined by mere chance but is, to a considerable extent, associated with certain characteristics of the evaluation situation." Plainly, we recognize the decisive interpersonal factors frequently associated with utilization (Patton et al, 1977; Patton, 1978, Gurel, 1979). We are hesitant, however, to endorse "orientation of the evaluator" as "perhaps the most influential [factor] in determining whether utilization will occur" (Alkin and Law, 1980: 79).

Enhancing utilization is an accepted part of our jobs. While we occasionally (albeit infrequently) are tempted by Harry Truman's notion, "I have found the best way to give advice... is to find out what they want and advise them to do it," the professional literature and daily occurrences have proved the most valuable resources in moving toward that goal.

As the literature has tended toward endless lists of hypothesized utilization factors (Oman and Chitwood, 1984; Leviton and Hughes, 1981; Dickey, 1980; Hansen, Martin and Oxford, 1980; Alkin, Daillak and White, 1979; Young, 1978; Cox, 1977), we have become increasingly skeptical of the direction and value of utilization study. In the end, we are inclined toward the conviction of Patton and his associates (1977:142).

> The issue at this time is not the search for a single formula of utilization success, nor the generation of ever-longer lists of possible factors affecting utilization. The task for the present is to identify and define a few key variables that may make a major difference in a significant number of evaluation cases.

Realizing, however, the need for and potential value of factor frameworks in guiding, conducting and applying research, we embrace Alkin's current structure and choose to suggest minor revisions and modifications as it is implemented.

Supportive Arguments

We wholeheartedly agree with Connolly and Porter (1980) who noted that characteristics associated with utilization are intimately intertwined. Not one, but constellations of factors contribute in different situations to utilization (Alkin, Daillak, & White, 1979). In arguing for the inclusion of multiplexity of data gathering methods, we are aware that the presence of this factor could be inferred to exist already within the framework because of its relationship, directly or subtly, to other established factors. The traditional functions of multiple data gathering methods have been those of validation and believability of findings (Patton, 1979; Bunker, 1978). Aside from these pedestrian motives, we maintain that the use of multiple data gathering methods contributes uniquely to utilization, unrelated to threats to validity. The following theses explicate this belief.

Multiplexity of data gathering methods can influence involvement of program developers, participants and decision makers in the evaluation process. Waller et al (1979) found that involvement of the user was the primary factor associated with utilization. Active involvement increases commitment to utilization of findings because users are an integral part of the evaluation's implementation. As reported by Oman and Chitwood (1984), management studies which included an interactive process between analyst and involved unit personnel showed above average levels of acceptance. Previously, Leviton and Hughes (1981) had reported positive relationships between the level of user involvement and utilization. In

addition, Cooley's (1983) "client-orientation" and Patton's (1982) "process-oriented" approaches to evaluation include this active involvement element.

A variety of data gathering methods can impact communication between program decision maker and evaluator and between evaluator and program participants. One investigation involving mental health agencies found that more useful studies featured more frequent communication between evaluator and staff (Windle and Bates, 1974). Similarly, Glaser and Taylor (1973) concluded that successful research studies were distinguished from unsuccessful ones by close communication between researchers and consumers. Frequent contact between evaluation principals can alter decision maker and evaluator perceptions of one another. Connolly and Porter (1980) advanced that previous interactions between evaluator and manager influence the trust placed in the evaluation findings, and that increased trust leads to utilization. Further, they argued that two-way communication between manager and evaluator is crucial to evaluation utilization.

Multiplexity of data gathering methods can affect credibility of the evaluator and evaluation findings. Leviton and Hughes (1981) suggested that although evidence of its effect on utilization is mixed, credibility of the producer of an evaluation is likely to be important. Use of multiple methods and measures allows the evaluator increased opportunities in which to demonstrate his/her abilities and skills. As a

result, the program decision maker comes to rely on the evaluator as a primary source of information.

Multiple data gathering methods can be associated with the visibility the project attains with a number of different audiences. Bunker (1978: 132) contended that "both accountability and probability of utilization are increased by wider distribution of findings." Similarly, in a study for the General Accounting Office, Young (1978) noted dissemination among issues that are important to utilization. Somewhat discounting the relationship between dissemination (i.e., visibility) and utilization, Dickey (1980) pointed out the general agreement in the literature on the value of dissemination but she reported finding no research documenting this relationship.

Evaluator understanding of a project can be influenced by the number and variety of data-gathering methods. If a decision maker is removed from the evaluation process, his/her information needs may be unclear. In this case, the use of multiple data collection methods could act to circumvent uncertainty or misconceptions about questions to be investigated. Oman and Chitwood (1984) reported that studies revolving around elaborate large scale questions had a lower level of acceptance than studies of more focused issues. Likewise, Connolly and Porter (1980) commented that decision maker use of evaluation information is more likely if the findings are produced in response to a specific information need. Dickey (1980) and Cox (1977) both reported instances in which decision makers were unable to utilize findings because their

questions were not addressed by the studies' designs and procedures. The use of multiple measures improves the evaluator's ability to understand both major and minor project issues, talk more fluently about the project and represent it more accurately. Also, it allows the evaluator to anticipate questions that may arise during the course of the project and have readily available data for discussion.

Multiplexity of data gathering methods can influence the probability that a methodological mix of collection strategies and reporting techniques will occur. The use of a variety of methods promotes wide appeal to assorted decision maker styles. Oman and Chitwood (1984) reported studies that show differences in acceptance of management reports based on methods of information collection. Along similar lines, Van de Vall et al (1976: 170) concluded that more utilization will occur for management research studies which employ "a high rate of eclecticism in the exploratory stage of a project." According to Cohen (1977), health care administrators vary in the degree to which they value and understand scientific information. He implied that sundry methods of collection and reporting might assist in increasing the impact of evaluation information. Based on study of a group of educational subjects, Dickey (1980:76) concluded "If the decision maker does not understand or see as appropriate the way in which data are collected, then belief in the data is likely to be diminished and utilization of the evaluation low." Her comments regarding the value of face validity in the conduct of evaluations give further support to the notion that

multiplexity of data gathering methods may be an important variable in utilization.

A variety of data gathering methods may impact the scope of an evaluation. In an article regarding this topic, Bunker (1978) pointed out that evaluation utility and comprehensiveness are directly related. Specifically, he commented that multiple data sources, multiple types of data, and data collection over time increase prospects for success in utilizing evaluation information.

Program Evaluation Descriptions

To test support for proposing the multiplexity factor for the utilization framework, four ongoing highly-utilized educational program evaluations were examined. Brief descriptions of each follow.

Summer Institute Program

As a result of the Florida legislative action, summer inservice institutes in science and mathematics were held across the state during summer 1984. In Hillsborough County approximately 400 elementary, junior high, and senior high teachers participated in one of 18 training programs related to their 1984-85 teaching assignment. Institutes included instruction in the following areas: current content information, content preparation consistent with the Florida Standards of Excellence, updating in quantitative laboratory and field data-gathering techniques, information on related careers, and clinical practice in teaching content learned in the institute. Structure and content of the 60-hour institutes were outlined by district instructional supervisors

collaborating with university faculty. Teachers who attended the institutes were paid for their participation and were eligible to earn credit towards renewal of their teaching certificates. Overall, more than 90 percent of the participants completed their program successfully.

Multiple data sources were used in the program evaluation to provide program designers with information to modify the ongoing program in subsequent summers and to gather outcome information about the program effects at three levels: immediate knowledge gain of participants, impact of the institutes on in-school instruction, and any effects on student achievement. Test results and successful program completion were summarized by institute as well as through use of extensive participant opinionnaires. The impact on instruction was assessed by mail-out surveys and Concerns-Based Adoption Model (CBAM) Levels of Use interviews with a stratified random sample of approximately 25 percent of the participants. For one of the institutes in which there was an identifiable match between institute content and course content, students were given a subject area achievement test and their scores compared to a control group from the previous year to gauge effect on student learning. Data gathering activities and reporting functions were scheduled over a year's time and a subsequent utilization survey of program designers indicated that not only did evaluation activities fulfill state reporting requirements, but they were used to improve the 1985 summer institute as well.

Chapter 1 Reading Microcomputer Component

In operation for the third year, the Chapter 1 reading microcomputer component is being integrated into 116 separate classrooms within 74 Hillsborough County elementary schools covering grades 3-6. Over 3,500 Chapter 1 students are given additional reinforcement of reading skills through use of computer assisted instruction. Additionally, these students are exposed to computing skills which previously had been reserved for students in above average groupings.

The district-wide implementation of the reading microcomputer component is designed under two phases: planning and training. Pilot evaluation data provided program developers with the framework for a modified district plan for year two. The training of teachers and aides is divided into six levels with installation of hardware at the school sites following Level II. Following a carefully constructed evaluation model which incorporates components of the Concerns-Based Adoption Model (Hall, 1979), the district phase was initiated in year two and continues to date.

> The Procedures for Adopting Educational Innovations Project at the R & D Center for Teacher Education developed a model emphasizing innovation adoption, the Concerns-Based Adoption Model (CBAM), that assumes change to be a highly personal and lengthy process, one that affects individuals differently. The model hypothesizes two dimensions along which individuals grow as they become more familiar with and sophisticated in using

innovations: Stages of Concern About the Innovation (SoC) and Levels of Use of the Innovation (LoU).

The Stages of Concern dimension focuses on the feelings, thoughts and information needs of the innovation "user." Individuals appear to be more self-concerned when they first find out about an innovation, wondering what it will require of them, how their roles must change. As these concerns are resolved, more "task"-oriented concerns emerge. Questions about what materials are needed daily and how to schedule time more effectively are typical. Later concerns focus on how the innovation affects students, how to combine efforts or even replace the innovation to enhance student learning. The CBAM describes seven Stages of Concern that reflect this progression.

The other dimension of the CBAM, Levels of Use of the Innovation (LoU), describes the behavior of individuals as they become more familiar with and more skilled in using an innovation. Each of the eight identified Levels of Use focuses on behavior that is characteristic of the innovation user at a particular stage of development. For example, at LoU II (Preparation), the individual is preparing for first use. This involves gathering resources, finding out detailed requirements, arranging the physical setting and scheduling initial steps. At each of the eight levels, specific behaviors

have been defined that describe characteristics of the innovation user. (Loucks, Newlove, & Hall, 1975, pp. 1-2)

Evaluation is integrated into all phases of the project's implementation and embodies the ongoing application of the CBAM. Multiple data sources are used continuously on a planned review cycle to provide feedback to the program developers. Prior to the start of inservice training, a configuration was developed which defined critical components for year two. From this configuration, a checklist was generated and is used on visits by the microcomputer training specialist. In addition, all inservice programs are evaluated using a Workshop Evaluation Form constructed by the federal evaluation office to certify delivery and assess usefulness of workshop information. Via written and verbal reports, results of these evaluation forms are provided to supervisors within two days of each workshop. To date, the scheduled periodic use of Open-ended Stages of Concern Questionnaire (SoCQ) and Configuration Checklist data have provided the most useful information for program planners.

Academically Gifted Program

The Elementary Academically Gifted Program (AGP) is designed to offer academically challenging content in the areas of mathematics and science to gifted students in grades three through six. Students receive two hours per day of accelerated and extended instruction delivered by a specially trained teacher certified in gifted education.

The AGP's philosophy is a significant departure from typical gifted curriculum models and the previous local model in that it emphasizes specialized academic instruction in two highly visible disciplines and singles out a particular group of students from their peers at the school building. For these reasons, as well as program improvement, a program evaluation is regarded as an essential element in program implementation procedures and activities.

The evaluation model resembles the traditional formative-summative pattern. Initially, descriptive questions were generated and information gathering occurred for the purposes of historical documentation, communication with interested but somewhat skeptical community groups, and program decision-making. The second program year's emphasis included the formative component with modified questions and data collection strategies, and added summative questions and procedures. Questions and focus for the third program year reflect program changes and modifications, collaboration with an internationally recognized gifted educator, and continued summative assessment.

Data collection procedures have involved samples of every relevant data source from school and district administrators to students, parents, teachers, university personnel and the professional literature. Strategies used for information gathering have included mail-out surveys, telephone and face-to-face interviews, classroom observations, town meetings, pencil-paper tests, and record reviews of such things as science fair entries, class rosters, and staff development offerings.

The Laboratory for Individualized Foundation Teaching (LIFT)

The Laboratory for Individualized Foundation Teaching (LIFT), an alternative education program, was initiated in one Hillsborough County elementary school during the second semester of the 1984-85 school year. The purpose of LIFT is to provide a highly motivating, educational environment designed to increase the rate of academic progress and decrease inappropriate student behaviors which interfere with the learning process. Students comprising the target group are both male and female from ethnic groups represented in the county, and attend grades four and five. The teacher, assisted by an instructional aide, instructs eighteen students following mainly the general elementary curriculum.

Multiple data gathering methods were employed in the program evaluation providing descriptive information to document, modify, as well as implement the program at 25 additional elementary schools during the 1985-86 school year. To monitor LIFT's most critical characteristics as they evolved at the initial site, weekly observations of LIFT were made. During these weekly visits, the principal, students, teacher, aide and support staff were interviewed and records were reviewed. Additional interviews were conducted with district administrators and parents of LIFT students.

Methodology

The four program evaluations described above formed the basis of this exploratory study. Thus far, research on utilization has been conducted primarily through retrospective case studies and simulation

investigations. Hence, these ongoing studies provided a variant mode for utilization study. Information was collected from decision makers and evaluators via observations and surveys. The following similarities exist among the program evaluations examined.

1) All are primarily formative studies whose purpose is to assist in decision making.

2) All are conducted by an internal evaluator.

3) All have available recent written reports which explicitly state conclusions and/or recommendations.

4) All involve centralized administrators or curriculum supervisors as primary decision makers.

5) All employ multiple measures and multiple data sources.

6) All are ongoing and currently being used in the decision making process.

To assure that each evaluation had achieved a high level of utilization, decision makers were observed and queried regarding their utilization of the evaluation's recommendations. A rather narrow definition of use -- that of actions based on recommendations and/or conclusions -- was employed.

Lack of specification of the type of utilization has been cited as a methodological problem in the study of utilization (Leviton and Hughes, 1981). To alleviate this weakness, Rich's (1977) "instrumental use" was selected as the utilization definition. Table 1 shows, for each

evaluation, the number and percentage of conclusions and/or recommendations which were acted upon by at least one decision maker.

Insert Table 1 About Here

After establishing that the study met the high-utilization criterion (i.e., at least two-thirds of conclusions/recommendations were followed), each decision maker then was asked to complete two surveys developed by the authors. Content of the surveys was derived by using components of two Alkin categories (human factors and evaluation factors), adding a descriptor for the multiplexity factor, and including several other elements occasionally mentioned in the utilization literature. The first survey, which presented 17 factors hypothesized and/or shown to have some relationship to utilization, required respondents to indicate the extent to which each factor influenced their utilization of written evaluation conclusions and/or recommendations. The second survey showed the same 17 factors and required the respondent to rank order the five factors which exerted the most influence in his/her decision to utilize the evaluation information. ~~(See Appendices A and B for surveys.)~~

On the first survey we hypothesized that the multiplexity factor would be considered a major influence in utilization as frequently as at least half the other factors. On the rank order survey, we did not expect the multiplexity factor to outrank other factors, but to be among the five most influential factors as frequently as at least half the other factors.

Results

Table 2 shows the number and percentage of respondents who indicated on the first survey the factors they considered to be of major, moderate and little or no influence in evaluation utilization. Factors are listed in descending order according to the frequency with which the factor was reported as a major influence.

Insert Table 2 About Here

Percents in the first numerical column show that eight of the 17 factors were considered by more than half the respondents to be of major influence in their decision to utilize the evaluation data. Among these eight factors is the multiplexity factor descriptor: variety of data collection methods. Thus, as hypothesized, the multiplexity variable was marked at least as frequently as half the other factors. Indeed, variety of data collection methods was rated as a major influence more frequently than ten factors, less frequently than five factors and with the same frequency as one factor.

Insert Table 3 About Here

As noted by other utilization researchers (Connally & Porter 1980; Alkin, Daillak & White 1979), many factors simultaneously contribute to utilization. Not surprisingly, then, the multiplexity factor was not selected as a major influence in isolation. As we reviewed the data, it appeared as if other utilization factors might have some relationship to

the multiplexity factor. To investigate further, surveys were separated into two groups: subgroup I consisted of the 11 respondents who selected the multiplexity factor as a major influence; subgroup II included the 8 respondents who did not identify the multiplexity factor as a major influence. Then, differences between the two groups were noted. Table 3 (with factors arranged in the same order as table 2) displays frequencies for both subgroups.

Due to the small number of respondents in both groups, we employed a cautious definition of difference (i.e., a "difference" exists when a factor was selected by a majority of respondents in one subgroup and less than a majority of respondents in the other subgroup). Based on this rule of thumb, evidence of a discrepancy exists for four factors: evaluator's interest in the program, assortment of information sources, type of evaluation model, and frequency of feedback concerning data evaluation activities and results. In each case, respondents who identified the multiplexity factor as a major influence were more likely to select these four factors as well. Conversely, respondents who did not choose the multiplexity factor were less like to identify these factors as major influences. Although various interpretations of this occurrence can be posed, the nature of these four factors suggest an interaction among them and the multiplexity factor. Additional study of these associations might be fruitful.

Table 4 shows two pieces of information regarding the rank order survey. Listed in the first numerical column is the number of

respondents who ranked the factor among the five most influential factors. To examine each factor's relative importance, rankings were assigned inverse weights as shown at the bottom of the table. Then, weights were summed for each factor and are shown in the second numerical column.

Results from the rank order survey mirror the earlier results in that substance of report and timeliness of reporting are factors which most influenced use of the evaluation information. However, your (user) involvement in the evaluation planning, the second highest percent in the initial survey, does not appear as frequently among the most influential factors when respondents ranked only five of the 17 factors. Based on the weighted sum scores, two other factors, frequency of feedback and reporting format, edge out the user involvement factor for the third and fourth place spots.

Insert Table 4 About Here

As hypothesized, the multiplexity factor was marked among the five most influential factors as frequently as half the other factors. Its weighted sum score of 16 was obtained because the multiplexity factor was ranked first, second and third one time each and fourth by two respondents.

Discussion

The primary purpose of this paper was to propose and explore the addition of one evaluation factor to Alkin's framework. Our preliminary research supports the soundness of this notion and also indicates revision and/or rethinking of two framework categories: evaluation factors and human factors.

Reassuringly, results of this investigation are congruent with earlier studies which found timeliness of reporting and substance of report to be major factors in evaluation utilization. Within his framework, Alkin considers timing of information along with frequency of information provided and format presentation as elements of evaluation reporting. Both evaluation reporting and substance of evaluation information are designated by Alkin as evaluation factors. Included within substance of evaluation information are information relevance and information specificity. Indeed, our findings support the inclusion of these factors within the framework and are further upheld by other researchers, including Pauley and Cohen (1984) who contend "reports must be timely and relevant to potential decision makers."

In addition to timeliness and substance, Alkin's framework contains other factors which respondents in this study considered as major influences in their evaluation utilization. The proposed factor -- multiplexity of data gathering methods -- while not included in the existing framework, was considered as influential to utilization as some which are already present.

Our results lend credence to the assumption that a variety of data gathering methods not only affects uniquely the use of evaluation information but contributes to related utilization factors, such as evaluator's willingness to involve users, evaluator's rapport with users, evaluator's credibility, users' commitment to use, substance of evaluation information, and evaluation reporting.

Because this study has serious methodological limitations (several of which were discussed earlier) and because, as Cohen (1977) notes, "formative evaluation findings are probably and more easily used than those obtained from a summative project," legitimacy of the multiplexity factor for summative evaluations must be investigated. Further studies also might include evaluations conducted by external evaluators.

Incidentally, results of this study provoked some thoughts about the human factors within the framework. In reviewing the results of the rank order survey, we were somewhat astonished to find the highest scoring factors to be related to methodology rather than human factors. Having cut our evaluators' teeth on the importance of "evaluator characteristics," this finding stimulated much discussion about the clarity of our survey instrument, veracity of the respondent group and quality of data collection procedures. Finally, we agreed that human factors in utilization lose their pedestal position for projects which involve internal evaluators who have proved their worth and established their roles. Also relevant in this study is the fact that all respondents have been educated as to program evaluation's purposes and

procedures and previously have utilized evaluation results. In these instances, decision makers may concentrate on methodological considerations in deciding whether to use evaluation information. Most internal evaluators operate from advantageous positions in this regard in that they are able to assist decision makers in clarifying questions, articulating the evaluation design and understanding results within the context of their organizations. Bickel (1984) recently observed (and rightly so) that a resident evaluator develops a better understanding of the context in which data are collected and interpreted. Consequences of this evaluator role are surely related to utilization.

A second issue worthy of further study is the "interest in the evaluation" factor. Within the existing framework, this variable is regarded as solely a user characteristic. Our findings suggest that interest in the project also may be related to evaluator characteristics. Replications of this study should investigate this distinction.

In sum, we have provided preliminary support that evaluation utilization can be influenced by the presence of multiple data gathering methods. We feel strongly, both as a result of our daily work and this exploration, that the multiplexity factor is an important one in utilization. Nevertheless, we are the first to admit that additional quantitative and rigorous study of this variable is necessary, and we intend to pursue its contributions with other evaluation projects.

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Table 1

Frequencies and Percentages by Evaluation Projects of Utilization of Conclusions/Recommendations

Evaluation Project	Number of Conclusions/ Recommendations	Number (%) Acted Upon
Summer Institute	27	26 (96%)
Chapter 1 Reading Microcomputer Component	6	6 (100%)
Academically Gifted Program	32	23 (72%)
Laboratory for Individualized Foundation Teaching	13	10 (77%)

Table 2

Frequencies and Percentages by Extent of Influence for Factors (N = 19)

Factors	Major Influence[a]		Moderate Influence		Little or No Influence	
	N	%	N	%	N	%
Timeliness of reporting	16	84%	2	11%	0	0%
Your involvement in evaluation planning	15	79%	2	11%	0	0%
Substance of report	14	74%	3	16%	2	11%
Evaluator's credentials	13	68%	2	11%	2	11%
Methods of reporting	12	63%	1	5%	2	11%
Variety of data collection methods[b]	11	58%	5	26%	1	5%
Evaluator's understanding of program	11	58%	4	21%	1	5%
Evaluator's interest in the program	10	53%	2	11%	6	32%
Assortment of information sources	9	47%	6	32%	1	5%
Type of evaluation model	8	42%	4	21%	3	16%
Frequency of feedback concerning data collection activities and results	8	42%	5	26%	3	16%
Reporting format	7	37%	4	21%	6	32%
Rapport with evaluator	7	37%	3	16%	7	37%
Instruments used to gather data	6	32%	7	37%	3	16%
Frequency of data collection	6	32%	5	26%	3	16%
Extent of literature review	1	5%	5	26%	8	42%
Evaluation cost	0	0%	1	5%	16	84%

[a]The median number checked as "major influence" was 7.
[b]Hypothesized multiplexity factor.

NOTE: Some respondents did not respond to all factors; thus, each row does not sum to 19 or 100%

Table 3

Frequencies and Percentages for Factors of Major Influence With and Without Multiplexity Factor

Factor	Subgroup 1 Major Influence with Multiplexity Factor N=11		Subgroup 2 Major Influence without Multiplexity Factor N=8	
	N	%	N	%
Timeliness of reporting	10	91%	6	75%
Your involvement in evaluation planning	10	91%	5	63%
Substance of report	8	73%	6	75%
Evaluator's credentials	7	64%	6	75%
Method of reporting	8	73%	4	50%
Evaluator's understanding of the program	6	55%	5	63%
Evaluator's interest in the program	7	64%	3	38%
Assortment of information sources	7	64%	2	25%
Type of evaluation model	6	55%	2	25%
Frequency of feedback concerning data collection activities and results	6	55%	2	25%
Reporting format	5	45%	2	25%
Rapport with evaluator	5	45%	2	25%
Instruments used to gather data	5	45%	1	13%
Frequency of data collection	5	45%	1	13%
Extent of literature review	1	9%	0	0%
Evaluation cost	0	0%	0	0%

NOTE: The median number checked as a major influence for subgroup I was 10. The median number checked for subgroup II was 7.

Table 4

Frequencies and Weights for Factors Ranked Among the Five Most Influential (N = 19)

Factors	N	Summation of Weighted Ranks[a]
Timeliness of reporting	12	29
Your involvement in evaluation planning	5	18
Substance of report	16	62
Evaluator's credentials	6	13
Method of reporting	7	18
Variety of data collection methods	5	16
Evaluator's understanding of the program	6	17
Evaluator's interest in the program	3	15
Assortment of information sources	3	11
Type of evaluation model	3	9
Frequency of feedback concerning data collection activities and results	8	20
Reporting format	7	20
Rapport with evaluator	2	6
Instruments used to gather data	7	18
Frequency of data collection	1	2
Extent of literature review	0	0
Evaluation cost	0	0

[a]Ranks were assigned weights as follows: rank 1 = 5, rank 2 = 4, rank 3 = 3, rank 4 = 2, rank 5 = 1. Then, for each factor the weights were added together.

Figure Caption

Figure 1. Factor Pattern for Evaluation Use

A. Setting the Stage

Pre-existing evaluation bounds
User identity
Project characteristics
Organizational features

B. Identifying/Organizing the Participants

User characteristics: * interest in evaluation * commitment to use * professional style
Evaluator characteristics: * background and identity * credibility * choice of role * willingness to involve users * rapport with users * commitment to use * political sensitivity
Evaluation procedures -- plan

C. Operationalizing the Interactive Process

Evaluation procedures -- execution
Substance of evaluation information
Evaluator commitment to use
Information dialogue -- formative
User information processing preferences

D. Adding the Finishing Touches

Evaluation reporting
Evaluation characteristics: * commitment to use * political sensitivity
Information dialogue -- summative
User commitment to use

Source: Alkin, 1984: 91